Original Paper

Self-Esteem and Anorectic Eating Concerns among Female University Students in Malaysia

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Abstract

Background: Self-esteem is a person’s appraisal of his own worth, significance, attractiveness, and competence. Low self-esteem could also lead to social, health and psychological problems including eating disorders. Eating disorder is when a person uses measures such as dieting, restricting intake of food or purging to control his or her body weight. Objective: The current study explores the relationship between self-esteem and anorectic eating concerns among female university students in Malaysia. Method: 217 female university students were studied, using Rosenberg’s Self Esteem Scale (SE-10) and Eating Attitude Test (EAT-40). Results: Students with low self-esteem had higher anorectic eating concerns. Race of the student had no significance in predicting eating disorder. Age plays an important role in eating disorder. Young students with low self-esteem are more vulnerable to anorectic eating concerns than older students. Conclusion: It was found that there exists an inverse but low correlation between the two variables self-esteem and anorectic eating concerns.

Keywords: Anorectic Eating Concerns, Self-Esteem

Introduction

A number of authors have emphasised importance of self-esteem in the etiology of eating disorders. Guindon has defined self-esteem as the attitudinal, evaluative component of the self; the affective judgments placed on the self-concept consisting of feelings of worth and acceptance, which are developed and maintained as a consequence of awareness of competence, sense of achievement, and feedback from the external world. Negative self-concept feelings and attitude could lead to social, health and psychological problems including eating disorders and depression. Studies done by Mas et al have shown the role of self-esteem as the main mediating variable in the effect exerted by certain personality traits in eating disorder.

Eating disorders are a complex set of illnesses that encompass a wide spectrum of abnormal eating patterns and can occur in all stages of life, from infancy to the elderly. The disturbances in eating behavior involve...
the manner, type, quantity, and rate of consumption of food. Dieting in Western culture has become a cultural preoccupation and it may even be argued that eating disorders are simply extensions of normal and socially acceptable modes of behaviour. In non-Western cultures eating disorders have, until recently, been considered rare and plumpness is the ideal for body weight and feminine beauty. The increasing number of new cases of anorexia nervosa and bulimia nervosa among Asian immigrants to Western countries and the consistent findings of abnormal eating attitudes and eating disorders among Asian and Arab teenagers indicate that these Eastern women have been exposed to Western values. The prevalence in Western countries of abnormal eating attitudes among female samples based on EAT-26 scores, ranged from 8.3% among college students in Switzerland to 26% among samples aged 22 years old in the USA. For nonwestern samples, prevalence ranged from 6.5% among adults in Hong Kong to 31.4% among nursing students in Pakistan.

The objectives of this study are:
1. To examine the level of self-esteem among female university students in Malaysia.
2. To study anorectic eating concerns among female university students in Malaysia.
3. To explore the relationship between self-esteem and anorectic eating concerns.

This study focuses on the normal variation of eating problems and not on the pathological variants of eating disorder. Eating disorder problem is how an individual experiences selected attitudes, behavior or traits related to food or eating. It may be hypothesized that lower the self-esteem lower the anorectic eating concerns.

Methods

Purpose: The purpose of this study was to find out the relationship between self-esteem and anorectic eating concerns, in female college students. Study site: The study was conducted in one of the universities at Sarawak, Malaysia. The study was approved by the university research committee. Data was collected in November, 2011. Study design: Questionnaire which focused on demographic aspects of students namely age and race. Instrument-rated: Consisted self-rated scales The Rosenberg’s Self Esteem Scale (SE-10) and the Eating Attitude Test (EAT-40). Sample selection: The survey was carried out on convenience sampling of 217 female university students. Students from second year and third year undergraduate classes who were available and willing to participate were studied. Criteria: Only those students who volunteered to participate in the study were included. They were explained the implications of the study. The only condition was that they should be from Sarawak; this was done to assure that the population selected is a homogeneous population. Participants: Students’ were given a questionnaire to study the demographic profile of students, the Rosenberg’s Self Esteem Scale (SE-10) and the Eating Attitude Test (EAT-40) that was developed by Garner and Garfinkel (1979). Data was analyzed using SPSS.

Rosenberg’s Self Esteem Scale. (SE-10)

Rosenberg’s Self Esteem scale was used to assess self-esteem. Respondents completed the scale by indicating their agreement with each of the 10 items on a 4 point scale. (3= ‘strongly agree’, 0= ‘strongly disagree’).
Five items in this scale are in reverse valence. A total Self-esteem score was obtained by summing the 10 responses. The score ranges from 0-30. Scores between 15 and 25 are within normal range. The scale generally has high reliability: test-retest correlations are typically in the range of .82 to .88, and Cronbach’s alpha for various samples are in the range of .77 to .88.

Eating Attitude Test (EAT-40)

The Eating Attitude Test (EAT-40) was developed by Garner and Garfinkel. It is a 40 item multidimensional self-report scale designed to assess the attitudes, behavior, and traits present in eating disorders particularly anorexia nervosa and bulimia nervosa. The average time to complete the scale is 10 minutes. Garner and Garfinkel (1979), reported an alpha coefficient of 0.94 to demonstrate internal consistency. Responses are rated on a 1 (Always) to 6 (Never) spectrum. Scores for each item differ from one another. Total score is the sum of each item. A score greater than 30 is considered to be an indicator of a possible anorectic eating concerns.

Results

Demographic Characteristics of students are as follow: Age: 23 % were in the age group 19-21 years and 77 % were in the age group 22-24 years. Race: 43% were Malays, 40 % Chinese and 17% other ethnic group including Indians.

Self Esteem (SE-10)

The least one has scored on this scale was 9 and maximum was 28. (\(\bar{x}=17.12, \ SD=4.95\)). A vast majority (60%) had a normal self-esteem in the range of 15 - 25. (\(\bar{x}=18.58, \ SD=3.89\)). Almost 33% had a low self-esteem and were in the low range (0-14). (\(\bar{x}=12.48, \ SD=1.36\)). A very marginal number (7%) had a high self-esteem (>26). (\(\bar{x}=26.73, \ SD=0.79\)). (F=96.72, p<0.0001). Cronbach’s alpha was 0.87 for the Malaysia population.

Age and Self-esteem

Mean self-esteem for those in the age group 19-21 years was lower (\(\bar{x}=16.10\)) compared to those in the age group 22-24 years (\(\bar{x}=17.42\)).

Eating Attitude Test (EAT-40)

In this study the least score on the EAT-40 was 3 and the maximum score was 39. (\(\bar{x}=18.28, \ SD=9.40\)). About 87% of the students scored less than 30 on this scale with no eating disorders. (\(\bar{x}=16.01, \ SD=7.78\)). Marginal number of students, 13% scored greater than 30, which may be a sign of anorectic eating concerns. (\(\bar{x}=33.60, \ SD=2.37\)). (t=11.84, d.f=215, p<0.0001). The reliability of the scale in Malaysia population was found to be good, Cronbach’s alpha was 0.79.

Age and Eating Disorder

Those in the age group 19–21 years had higher anorectic eating concerns (\(\bar{x}=19.18\)) compared to the age group 22–24 years (\(\bar{x}=18.02\)). There is a significant difference between the two age groups namely 19 to 21 years and 22-24 years. (\(\chi^2 =629 \ p<0.001\)).

Race and Eating Disorder

In this study, the mean EAT-40 score for Chinese students was \(\bar{x}=19.11\) compared to the Malay students \(\bar{x}=17.45\) (t-test not significant).
**Hypothesis:** Lower the self-esteem lower the anorectic eating concerns. It was found that there exists an inverse and low correlation between the two variables self-esteem and EAT-40, eating disorders. (\(\text{cor} = -0.38\). (p<0.05). Hence, the hypothesis is rejected.

**Self Esteem and Eating Disorder**

**Table 1. Self Esteem and Eating Disorder**

<table>
<thead>
<tr>
<th></th>
<th>EAT-40 (Normal &lt;30)</th>
<th>EAT-40(Eating concerns &gt;30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE-10 Low</td>
<td>53 (24%)</td>
<td>20 (9%)</td>
</tr>
<tr>
<td>SE-10 Normal</td>
<td>121 (56%)</td>
<td>8 (4%)</td>
</tr>
<tr>
<td>SE-10 High</td>
<td>15 (7%)</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>189 (87%)</td>
<td>28 (13%)</td>
</tr>
</tbody>
</table>

Table 2 shows, 56% of the students were in the normal range of SE-10 and EAT-40. 24% students scored low on the SE-10 normal range of EAT-40, 9% scored low on SE-10 and had high on EAT-40. 4% scored low on SE-10 and had high on EAT-40. None of the students scored high on the SE-10 and EAT-40.

**Correlation between self-esteem and eating disorder.**

A moderate Pearson’s correlation (r=0.61, p<0.001) is observed between students with low self-esteem and high EAT-40. \(R^2\) change is 0.37 or 37% of the variation in the outcome is determined by the predictor variable and 63% of the variation is caused by other factors.

**Discussion**

Eating disorder can best be viewed as a ‘symptom’ of chronic low self-esteem\(^{11}\). In particular, the ideation of the thin body type has been identified as a possible factor leading to the development of eating disorder\(^{12}\). In this study, 217 female university students from Sarawak were asked to complete the EAT-40 and SE-10. The purpose of this study was to find out the relationship between self-esteem and anorectic eating concerns in female college students.

Low self-esteem has been shown to one of the most important factors involving the development of eating disorders\(^{13}\). In this study, about 33% scored low on the SE-10.

Power, Power & Cabadas\(^{14}\) conducted a similar study on eating disorders study in Ecuador. They found that the mean EAT-40 was 17.12, with 14% filling criteria. The mean EAT score for the researched Malaysian student population\(^{15}\) was 12.26 with a high standard deviation of 7.36. In this study, the mean EAT-40 was 18.28 and standard deviation was 9.40. The result is bit
higher compared to the Malaysian study\textsuperscript{15} but almost similar to the Ecuador study\textsuperscript{14}.

Gender is a known risk factor for eating disorders: these disorders are much more common in women than in men\textsuperscript{16}. Men have been less likely to develop eating disorders, which is consistent with lower levels of social emphasis on male body weight and shape\textsuperscript{12}.

Social roles of urban and rural women can be very different. Depending on where they are born and reside, women in Malaysia may lead very different lives and experience their body differently.

For young urban women who enjoy education, career development and mate choice, slimness is emblematic of attractiveness and competence in both social and work related domains. Rural women’s lives are still under substantial patriarchal influence, and in this rural context, body fullness may symbolize family fertility and wealth\textsuperscript{12}.

Eating disorders are also associated with ethnic differences in socio cultural standards of ideal body weight and shape. Among Chinese, plumpness is viewed as a sign of good health, longevity, prosperity and fertility whereas thinness is linked to poor health and bad luck\textsuperscript{17}. In a study done by Edman\textsuperscript{18}, it was found that Malay students scored higher on the EAT-26 than the Chinese students. In contrast, this study showed that the Chinese students scored higher on the EAT-26 compared to Malays students.

Indran and Hatta\textsuperscript{15} examined the eating attitudes among a multi ethnic group of Malaysian school girls and found approximately 7 percent were at risk for eating disorders. Body shame, feeling negatively about the self when cultural body standards are not achieved, explains the internalized effect of cultural body ideals. Appearance control beliefs reflect the extent to which an individual believes she/he can control her/his appearance, and emphasize the contradictory relationship some have with their bodies\textsuperscript{19}.

There is a relationship between stressful life events and adolescent dysfunction, such as low self-esteem\textsuperscript{20}. University students may encounter personal, family, social, and financial stresses while trying to cope with their academic challenges. Stress, anxiety and depressed mood have shown high co morbidity with and the potential to trigger bouts of addiction-like eating behavior in humans\textsuperscript{21}. Such conditions could affect their eating behavior and health status which, in turn may have negative effects on their studies\textsuperscript{3}. Stress experienced by younger generation of female in a rapid developing modernized country like Malaysia may also account for the obtained prevalence of abnormal eating attitudes that is comparable to the studies done in Western population\textsuperscript{17}.

In this study it was found, as the age increases the anorectic eating concerns gradually decreases. Interestingly, it was found that the mean self-esteem for those in the age group 19-21 years was lower compared to those in the age group 22-24 years. During transition period such as entering a university from high school the young adults may often experience increased self-consciousness and lowered self-esteem.

Young adults may be under pressure to look good and be accepted by their peer group. Individuals with low self-esteem are generally suggestible to comments on their physical appearances by their peer group. Schutz & Paxton\textsuperscript{22} found a significant co relation between body dissatisfaction and
disorder eating, and negative friendship qualities.

Self-esteem uniquely predicted body surveillance, body comparison, and body shame, which illustrates the importance of including self-esteem as a variable within the objectification theory framework. Given that women with high self-esteem are generally satisfied with their inner qualities as well as appearance, they may be more likely to accept their body as it is rather than vigilant monitoring it and comparing it against other women’s bodies. In contrast, women with low self-esteem tend to lack confidence in their inner qualities and their outer appearance and are likely to turn to societal ideals for guidance, which encourages them to focus on their appearance and to gauge their appearance against other women’s appearance.

Correlation was done to test this hypothesis; lower the self-esteem lower the anorectic eating concerns. It was found that there exists an inverse and low correlation between the two variables self-esteem and EAT-40, eating disorders. Hence we reject the hypotheses. In other words, lower the self-esteem higher the anorectic eating concerns. This result supports previous studies done by Kansi & Wichstorm, Bergman and also by Eiber et al. that states that eating disorders are associated with low self-esteem. Self-esteem in people with eating disorder is excessively based on body dissatisfaction Eiber et al. However, this study reports a very small variance in relation to low self-esteem and high EAT-40. 63 % of the variance was caused by other factors.

The goal of the current study was to determine whether there is a relationship between self-esteem and anorectic eating concerns, in female college students. In may be concluded from this study that, self-esteem play an important role in eating disorders. Students with low self-esteem had higher anorectic eating concerns. Race of the student had no significance in predicting eating disorder. Age plays an important role in eating disorder. Young students with low self-esteem are more vulnerable to anorectic eating concerns than older students.

One of the limitations of this study is it in not clear whether the students have fully understood the items in the scale before answering them, due to difficulty in understanding the items in the scale particularly the EAT-40 which was lengthy. Another limitation’s that the students selected consisted of only those residing in Sarawak, Malaysia. It is hoped that findings from this study adds to knowledge of the phenomenological aspects of the relationship between self-esteem and anorectic eating concerns. The result of the current study also demonstrates the potential bias in methodological issues.

References


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